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Transactions of the American Ophthalmological Society. Twenty-second Annual Meeting, 1886. 8vo. pp. 220. Boston, published by the Society.

This second part of the fourth volume is the largest annual contribution which the Society has yet made to its transactions, and the matter it contains makes it by far the most important American contribution of the year to the literature of ophthalmology; many of the papers, too, are of general interest.

The retinal lesions connected with albuminuria are extensively discussed: Dr. C. S. Bull contributing an "Analysis of One Hundred and Three Cases of Exudative Neuro-retinitis Associated with Bright's Disease;" Dr. George C. Harlan, a case of "Thrombosis and Perivasculitis of the Retinal Vessels;" and Dr. S. D. Risley a case of "Albuminuria of Pregnancy; Retinitis; Induced Premature Delivery."

Bull excluded all cases due to scarlatina or pregnancy, and reported only such as he had been able to follow to their termination, or to the date of the report. His patients included fifty-six men and forty-seven women. Both eyes were affected in ninety-three cases; hemorrhages occurred in one or both eyes of sixty-nine patients; while all but three came to present evidence of cardiac hypertrophy with or without valvular disease. In thirty-two cases vision improved under treatment, but without absorption of the glistening exudation at the macula.

In this series of cases the gravity of the prognosis is well illustrated. Thirty had died within six months after they were first seen, and in the next six months twenty-seven more. In the second year eighteen died; in the third year, six; in the fourth year, four; and in the sixth year, one. Of the seventeen still living, fourteen had been first seen within the last six months; two others within a year; and only one had been first seen seven years ago. In the discussion Dr. Gruening stated that of one hundred cases he had collated, none had lived more than two years.

For those cases arising from scarlatina, and especially in those from pregnancy, the prognosis is entirely different. This is well illustrated in Dr. Risley's case, where the patient, after being almost blind, with the urine loaded with albumen, and after premature delivery becoming unconscious and hemiplegic, and subsequently exhibiting aphasia, made an excellent recovery, vision coming up in the right eye from counting fingers at two feet to $\frac{20}{\text{xxx}}$, and in the left from $\frac{10}{\text{cc}}$ to $\frac{20}{\text{xx}}$; while the very extensive retinal exudation disappeared entirely from the latter, and left but a few splotches on the eye-ground of the former.

Dr. Harlan describes a case of almost universal change in the retinal vessels of one eye, with small hemorrhages and other slight retinal changes in the other eye, in a patient who shortly afterward had albuminuria and partial left hemiplegia. The case is illustrated by a plate showing the appearance of the fundus; the darker red of the normal vessels being replaced by broader bands of glistening white.

It has from time to time been remarked that "Listerism" and the "gospel of cleanliness" seem to arouse no general interest among ophthalmic surgeons. The reason doubtless is, that it has never been customary to invite assistants to thrust their dirty hands into the corneal incision; while the dictum of high authority forbade the introduction of any instrument not absolutely necessary, and the necessity for perfectly keen edges, and smooth-working joints invites to scrupulous cleanliness of such instruments as must be introduced. Then, too, the constant bathing of the eye by the lachrymal secretion, and the outpouring of the aqueous humor through any corneal incision tended to prevent infection. So that the ophthalmic surgeon practised asepsis, as the rustic talked prose, without knowing it. But although this was generally true, it occasionally happened that in the most promising case, after the neatest operation, an eye would be lost by general purulent inflammation; indicating, that to be right by chance, is not so safe as to be right by definite knowledge. Attention is called to the subject by Dr. H. Knapp, by some "Remarks on Pyogenic Microörganisms, with Demonstrations and Experiments." The demonstrations included the making of cataract extractions upon the eyes of four rabbits; on the left eyes with clean instruments, on the right with instruments contaminated with staphylococci. The operations were rudely done, and the injury to the left eyes increased by stirring the deeper parts with a sterilized hook. Yet while the right eyes all showed free suppuration when exhibited twenty-four hours later, three of the left eyes remained free from suppuration throughout, and the fourth, showing it at a later date, was believed to have been contaminated by the right eye of another rabbit kept in the same box, so that their heads were in close contact. Dr. Knapp believes that for eye surgery smooth-cutting instruments are best sterilized by washing in clean water, and wiping and polishing on a clean towel; because any efficient antiseptic solution is likely to dull a cutting edge. Tarnished instruments cannot be cleaned in this way, and rough instruments must be placed in some antiseptic solution.

Cataract extraction has its usual share of papers and discussion. Dr. G. Strawbridge offers a "Report of Two Hundred and Sixty-one Cases;" Dr. H. Knapp, a paper on "Cataract Extraction without Iridectomy;" Dr. D. Webster, "Report of Fifty Cases of Cataract Extraction with Remarks;" Dr. H. D. Noyes, "Extraction of Hard Cataract—Death on the Fifth Day—Examination of the Eye." The principal interest in these papers and the extended "discussion" which follows them, attaches to the operation of extraction without iridectomy, as to which there is an agreement that its value and the classes of cases to which it is suited are not yet fully determined; to the washing out of the conjunctival sac and the anterior chamber with antiseptic solutions, which is recommended; and to the use of cocaine for operations threatening the integrity of the cornea.

Bearing on the latter point several speakers report bad effects from the free use of strong solutions. But there seems to be a general agreement that smaller quantities, as a drop or two of a two or four per cent. solution, answer the purposes of a local anæsthetic about as well and are free from danger. It is to be feared that the danger which cocaine brings to the non-vascular cornea, both by the anæsthesia which allows the unrecognized presence of irritants, and the lessening of its nutritive supply by contraction of the neighboring vessels, is not yet sufficiently understood by many who prescribe it. Recently the writer has seen tedious and very painful inflammation of the cornea with extensive superficial sloughing and consequent opacity, caused by frequently repeated applications of a four per cent. solution of cocaine to relieve the pain of an acute catarrhal conjunctivitis. The attending physician had ordered the solution to be used at considerable intervals, the patient found it gave relief, which was of short duration, and repeated the application with each recurrence of the pain. There resulted the loss of most of the surface of the cornea, leaving an exquisitely painful ulcer and permanent damage to the sight.

Returning to our subject, we find a paper by Dr. B. E. Fryer on "The Use of Hot Water in Some of the Conjunctival and Corneal Inflammations." Not warm, but hot water is to be used. He says:

> "I was astonished in the earlier cases (it being new experience to me) at the tolerance and even indifference to the heat by the patient. Water in which I could not retain my hand a minute, apparently made no unpleasant impression on individuals who had used it at the same temperature for a few hours or for a day or two. The temperature of the water should not be lower than 140°, and as much higher as can be tolerated; of course, short of blistering."

Its use was recommended in purulent and catarrhal conjunctivitis, phlyctenular ophthalmia, and in corneal inflammations and ulcers. It is especially effective in relieving the pain of the latter. Dr. Fryer's estimate of such treatment is confirmed by other members.

Dr. Wm. F. Norris offers "Some Remarks on Asthenopia and the Changes in Refraction in Adolescent and Adult Eyes," including the report of a series of cases of hypermetropia diminishing or passing over into myopia. He regards diminishing hypermetropia and increasing myopia as different stages of the same process; and "would urge, therefore, the careful correction of every case of ametropia where there is accompanying asthenopia." "All such cases should be carefully measured under a strong mydriatic, as it is impossible to correct them accurately without it." While under the influence of the mydriatic the eye should be protected by dark glasses, lest the excess of light "cause a low grade of chorio-retinitis, which it is much easier to call into existence than to cure."

Dr. J. A. Andrews contributes a paper on "The Electric Light as an Illuminator—The Effect of Strong Light on the Eye;" based in part on the examination and observation of eleven hundred persons habitually working by the light of the incandescent lamp of Edison. From his conclusions, we quote:

> "The *arc light* in its present state should be positively rejected as unsuitable and actually harmful to the human eye, particularly on account of its steadiness. The *incandescent light of Edison,* because of its steadiness, adequate power, and composition, is safe, and occupies at present the first position as a means of artificial illumination."

Dr. W. F. Mittendorf gives an account of "Two Epidemics of Molluscum Contagiosum," a skin disease, interesting the ophthalmologist by its predilection for the eyelids. These epidemics, including nearly one hundred cases, throw some light on the mooted question of the contagiousness of this affection.

Reports of cases; and descriptions of new instruments, tests, and procedures; with a couple of papers on geometrical optics, occupy the remainder of the volume. E. J.

L'Amputation du Membre Supérieur dans la Contiguité du Tronc. (Amputation Interscapulo-thoracique.) Par Paul Berger, Chirurgien de l'Hôpital Tenon, Professeur Agrégé a la Faculté de Médecine, Membre de la Société de Chirurgie. G. Masson: Paris, 1887.

Interscapulo-thoracic Amputation of the Upper Extremity. By Prof. Paul Berger. Paris, 1877.

This monograph by Prof. Berger is a treatise upon amputation of the upper extremity and scapula, either at one operation, or in consecutive periods. He designates this procedure as "Interscapulo-thoracic amputation," but it is usually spoken of as amputation above the shoulder-joint. The book, which is written in the French language, contains 371 pages, and is illustrated with several woodcuts and two colored lithographic plates. The style is simple, and can be readily understood even by one whose knowledge of French is not great.

The author states that the meagre notice of this operation which is found in the classical treatises upon operative surgery, renders it desirable that a thorough study of this subject should be undertaken, since the operation, though not often required, does in some, otherwise desperate, cases afford an effective resource. The histories of fifty-one cases culled from literature or from the personal experience of the author are recorded, and form the basis of the excellent critical remarks which follow. The operation is altogether modern, the earliest case recorded being that performed by Ralph Cumming, a surgeon in the English Navy, in 1808, though Cheselden figured a cured case of accidental ablation of the upper extremity and scapula in his *Anatomy of the Human Body*, published in 1768.

After giving the details of the different operations which have been performed, the author considers the subject from various standpoints, such as the mortality inherent to the operation, the causes of death, the accidents occurring during and after the operation, the indications for the operation, and the remote consequences which may follow it, and finally general considerations upon operative technique. The mortality varies with the nature of the affection for which the operation is performed, thus, in those cases where amputation is performed for pathological causes the mortality is about 20 per cent., whilst in traumatic cases 30¾ per cent. die. The mortality of primary operations, in which the arm and scapula are removed at the same time, is about the same as in secondary operations where the shoulder blade is removed some time subsequent to the primary operation. This is rather an exceptional fact, as it is a common observation that a primary amputation at a certain height is usually more fatal than a secondary operation performed at the same level. Amongst the immediate results which may